

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : A61F 13/15, B65D 75/00		A1	(11) International Publication Number: WO 00/13632 (43) International Publication Date: 16 March 2000 (16.03.00)
<p>(21) International Application Number: PCT/RU99/00322</p> <p>(22) International Filing Date: 6 September 1999 (06.09.99)</p> <p>(30) Priority Data: 98116628 9 September 1998 (09.09.98) RU</p> <p>(71)(72) Applicant and Inventor: STAVRULOV, Igor Anatolievich [RU/RU]; ul. Michurina, 17-90, Khimki, 141400 (RU).</p> <p>(74) Agent: TSETOVICH, Nataliya Leonidovna; ul. Lavochkina, 50-1-24, Moscow, 125502 (RU).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>	
<p>(54) Title: PACKAGES WITH PRINTED DESIGNS FOR HYGIENIC PRODUCTS</p> <p>(57) Abstract</p> <p>Single use hygienic products such as pampers, diapers, sanitary napkins or linings are traditionally wrapped in one or more envelopes. One of the envelopes bears usually some information about the product. It is provided to wrap the product in an envelope bearing images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer. The images may include hygienic advises, recommendations for children education and care, complexes of sport exercises, and also proverbs, sayings, aphorisms, short poems, children's fairy tales, wishes, interesting facts and observations, puzzles, rebuses, chess tasks and etudes, conundrums. The images on envelopes of products incorporated in a block making the minimal commodity unit shall be various but shall be logically interconnected.</p>			

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		

PACKAGES WITH PRINTED DESIGNS FOR HYGIENIC PRODUCTS

This invention relates to the art of sanitation and hygienics and concerns to
5 individual hygienic single use products such as pampers, diapers, sanitary
napkins or linings, and similar products.

Background Art

Pampers, diapers, sanitary napkins or linings and similar single use
10 products of hygienic purpose, which are made of various materials and have a
various design, come to retail trade in blocks of individual products incorporated
by common packing. Said blocks make minimal commodity unit, while said
individual products usually are not sold by pieces.

Any hygienic product which is included in the block, may or may not have
15 an individual envelope.

The common packing of minimal commodity unit bears on its surface
images including the unified minimally necessary information on the goods: the
name of the product, some information on its manufacturer, on quantity of the
products in packing and so on. Sometimes they include some additional
20 information concerning properties of the goods or a method of its use.

Sometimes the images placed on surfaces of common packing are pictures,
for example, they may be logos, and also some decorative elements.

An individual envelope of each product (if any) bears on its surface images
which duplicates completely or partially the images placed on common packing,
25 but in most cases it bears no images at all.

Sometimes the product itself may serve as the carrier of the additional
visual useful information about the product and its condition.

It is known, for example, a children's diaper which have a band of water-
absorbing paper placed between a water-absorbing lining and an external

translucent water-proof cover. The band bears a picture made of a paint which is not dissolved in water. This band becomes transparent being wet, and the picture can be seen. It makes possible to define the degree of water absorption by the intensity of the band coloring. (See USA patent US 4705513, IPC A 61 F 13/16, 5 1987).

A picture may be placed on an external surface of a children's diaper by the thermochrome ink. The picture can serve as the indicator of diaper condition. The color of the picture changes, if the diaper external layer temperature exceeds the certain norm, that indicates the raised diaper humidity. (See USA patent US 10 5389093, IPC A 61 F 13/15, 1995).

An indicator which is made of a water-solved paint may be placed on an external surface of sanitary linings. It is well seen in a dry condition, and it disappears at wetting of the lining. (See USA patent US 4022211, IPC A 61 F 13/16, 1977).

15 Thus, the envelope and/or common packing of the afore mentioned individual hygienic products may serve as carriers of the minimally necessary information about the product. The product itself, including its surface, may sometimes serve as the carrier of the additional information about its condition during the use.

20 The general approach is known to use the goods of daily demand, mainly their packing or elements of packing, as carriers of an information which has been not connected to properties of the goods, preferably of advertising nature.

25 There was proposed, in particular, to place a picture on foodstuff packing. The picture was an instruction on opening of the packing. (See USA patent US 5094863, IPC B 43 M 7/00, 1992).

Advertising texts were placed on a seen surface of an internal wrapper of cigarettes packed into a cardboard pack. (See European patent EP 0646531, IPC B 65 D 85/10, 1997).

It was proposed to place an additional stitch in cardboard cigarette packing. Surface of the stitch bears an advertising information. (See European patent EP 0665174, IPC B 65 D 85/10, 1997).

There is no information known to the applicant about the use of surfaces of 5 packing or elements of packing of single use hygienic products as carriers of any information, exceeding the minimally required one on the products.

The standard method of single use hygienic products packing provides for placing of some number of the individual products in a common packing, which 10 surface bears images containing the minimally necessary information on the products. Each product may be covered with an individual envelope bearing on its surface the same image which is placed on the common packing. Such block of products makes a minimal commodity unit for a retail trade.

Brief Description of the Invention

15 Main aim of the present invention is to increase attractiveness of single use individual hygienic products such as pampers, diapers, sanitary napkins and linings, and similar products, and, accordingly, to improve competitiveness of such products and to increase consumer's demand for them.

Such result is achieved because:

20 - each proposed product is the product covered with an individual envelope, which surface bears images in the form of texts and/or pictures of educational, entertaining, instructive or other nature attractive to a consumer;

- proposed method of individual hygienic products packing provides that non-identical images shall be placed on surfaces of envelopes covering the 25 individual products, which altogether makes a minimal commodity unit.

At implementation of the invention, each product is placed in an individual envelope which external surface bears images in the form of texts and/or pictures of figures of the attractive to a consumer contents.

Some number of such individual products, each of which is covered with an individual envelope, are incorporated in blocks making minimal commodity units, and placed in common packing which external surface bear the standardized image including minimally necessary information on the products.

5 The individual envelope, which cover the afore mentioned products, may be made of a material on a paper basis, or of polymers.

In the preferred mode of implementation of the invention, the hygienic product shall be covered with the individual envelope from all sides, so that the closed tight (hermetic) space is created inside the envelope.

10 The images which are placed on a surface of the envelope, may be in the form of texts, pictures, or combinations of the texts and pictures, completed on sense and plot, which contents and form should attract attention and interest of a consumer.

15 Here and below the "text" means an independent image carrying a readable information and occupying, at least, a part of the envelope surface; and the "picture" means all other independent images occupying, at least, a part of this individual envelope surface, except for textual ones.

The images shall contain the information of educational, entertaining, instructive or other nature, which causes consumer's positive emotions.

20 The texts may, for example, be useful advises, wishes, parting words, proverbs, sayings.

Figures may illustrate the texts or may have an independent meaning, being, for example, puzzles, rebuses, or conundrums.

25 The images may be complemented by decorative elements such as patterns, vignettes, ornaments.

The images become to be attractive to a consumer, thanks to, first of all, their semantic contents.

The images on surfaces of individual envelopes covering separate products, shall be not identical. It is the essential feature of the present invention.

The requirement of the images inequality is satisfied under any of the following conditions:

- the image on the individual envelope surface of, at least, one product in the block of products making minimal commodity unit, does not repeat;
- 5 - the images on the individual envelopes surfaces of any product in the block of products making minimal commodity unit, do not repeat.

The "minimal commodity unit" means in this case a block of homogeneous products incorporated by a common standard packing. The products come to retail trade in the blocks and do not sold separately.

10 The preferred mode of implementation of the invention provides that all images on surfaces of individual envelopes of separate hygienic products making minimal commodity unit, did not repeat.

The individual envelopes covering hygienic products making minimal commodity unit, may vary also by color and texture.

15 It is desirable, that the degree of a variety of the images was such, that the probability of repeated purchase by one consumer of packing of products with the images, already known for him (her), was minimized.

20 Desirable aroma may be given to the product previously, and then the product can be covered by the individual envelope which creates the internal hermetically closed sealed space.

25 The product may be sterilized after it is placed in the individual envelope creating the closed tight internal space.

Hence, the use of the proposed invention can allow not only to increase attractiveness of the individual hygienic products, but also improve their quality, in particular, thanks to reduction of probability of their damage and pollution.

Detailed Description of the Invention

Traditionally all hygienic products making minimal commodity unit, are completely identical in the sense that any hygienic product on appearance and

quality does not vary from any other product which is placed in the commodity unit. The understanding of this fact was the precondition of creation of the present invention.

That rule is observed in all cases: when the hygienic products have or have 5 no individual envelopes, and when the individual envelopes (if any) bear or bear no images.

The inventive idea is to give to identical on qualities hygienic products, making minimal commodity unit, attributes of individuality, i.e. appearance 10 distinguishing one of these products from the other.

10 This idea is realized because each hygienic product which is placed in a set of products, making the minimal commodity unit, is covered with an individual envelope which surface bears images in the form of texts and/or pictures.

The inventive idea realization depends on meeting the following two 15 conditions.

15 The claimed product covered with an individual envelope with an image on its surface, is characterized in that this image should have the certain semantic meaning: it should be interesting, attractive and useful to a consumer; it should cause in him (her) positive emotions.

20 The claimed method of packing of the hygienic products covered with the individual envelopes with the images on their surfaces, is characterized by that 25 these images on surfaces of envelopes of products making minimal commodity unit, are not identical.

The essence of the claimed invention consists in the following.

25 Each single use hygienic product is placed in the individual envelope which external surface bears texts and/or pictures of the contents, attractive to a consumer, in particular, of entertaining, educational, instructive, or similar nature.

Some number of such individual products which are not come to the retail trade separately, are covered with individual envelopes, incorporated in a block 30 making minimal commodity unit, and placed in common packing which surface

bears standardized images including the minimally necessary information on the products.

The products may be pampers, sanitary napkins or linings, children's diapers, or similar goods.

5 The individual envelopes, which cover the afore mentioned products, may be made of a material on the paper basis, or of polymers.

Preferred mode of implementation of the invention provides that the hygienic product shall be covered with the individual envelope from all sides, and the individual envelope creates the closed tight space.

10 However it is possible, that the individual envelope may cover the product only partially and the individual envelope did not create the tight cavity.

15 The images which are placed on a surface of the individual envelope may be in the form of texts, pictures, or combinations of the texts and pictures completed on sense and plot, which contents and form should attract consumer's attention and interest.

The images may be placed on external or internal surface of the envelope, as well as on its both surfaces.

The text may contain an information of educational, entertaining, instructive, or other nature, which shall cause consumer's positive emotions.

20 It may contain, in particular, hygienic advises, recommendation for children education and care, culinary recipes, an information about the food energetic value, manuals on preparation of children's dietary products, complexes of sports exercises, and also more general information - proverb, sayings, aphorisms, short poems or fragments of poems and prose, children's fairy tales, 25 wishes, interesting facts and supervisions, all depending on the goods and potential circle of its consumers.

The pictures may illustrate the texts. They may also contain, for example, puzzles, rebuses, or conundrums.

Any images may be complemented by decorative elements, in particular, vignettes, ornaments, patterns, or by other works of decorative art. Answers to tasks may be placed on envelopes back surfaces.

5 Inequality of the images on surfaces of envelopes covering each product is the essential feature of this invention.

The "images inequality" means the non-coincidence of the complete corresponding images, though separate elements of the images may coincide.

10 It is understood in the limits of this invention, that the requirement of the "images inequality" is satisfied, if the images on the envelopes of any products making minimal commodity unit, are not identical.

The "minimal commodity unit" is a block of homogeneous products incorporated by a common standard packing which is offered for retail trade and does not sold separately.

15 The minimal requirement of the "images inequality" shall be considered as observed, if the image on the envelope of, at least, one product in the block of products making minimal commodity unit, does not repeat.

By other words, the requirement of the images inequality is satisfied equally under the following conditions:

20 - at least, one image on a surface of the individual envelope of the product in the block of products making minimal commodity unit, does not repeat;
- the images on surfaces of individual envelopes of any product in the block of products making minimal commodity unit, do not repeat.

25 The last mode of the invention implementation is mostly attractive to a consumer, because he (she) receives the maximum of the useful and accessible information at purchase of each minimal commodity unit.

Except for the unequal images, the individual envelopes may differ each other by color or texture.

It is desirable, that the degree of a variety of the images was such, that the probability of repeated purchase by one consumer of packing of products with the images, already known for him (her), was minimized.

It is necessary, for this purpose, to update periodically the images, which 5 are placed on a surface of the individual envelopes.

At single purchase by one buyer of several homogeneous commodity units, it is desirable to give him (her) blocks of products with various series of the images on the individual envelopes in the block of products.

It is preferable, that the images on individual envelopes covering products 10 in one commodity unit, were logically interconnected, in particular, by common idea, uniform subjects or in a similar way.

The product individual envelope which bears the images, attractive to a consumer, may be the sole one. The products with such envelopes are 15 incorporated in blocks making minimal commodity units and placed in common packing bearing the standardized information on the goods.

However, the envelope with the information, attractive to a consumer, may be not only sole one. Each such product may be covered also with the second (external) individual envelope bearing images which duplicate the images on the surface of common packing. Such products covered with the double envelope, 20 also are incorporated in blocks of products and then placed in common packing with the standard information on its surface.

Desirable aroma may be given to the product before it is placed in the internal individual envelope, after that the internal space shall be tightened (hermetic) by the envelope.

25 The product may be sterilized after placing in the envelope creating the tight internal space.

Hence, use of the claimed invention may allow not only to increase attractiveness of individual hygienic products, but also improve their quality by means of reduction of probability of their damage and pollution.

The essence of the applicant's proposal is illustrated by the following examples which are not having, however, any limiting character.

EXAMPLE 1.

5 Sanitary linings were placed in individual paper envelopes which surfaces bear images including the texts of hygienic advises, illustrated by the appropriate pictures.

10 The linings which were placed in the envelopes, were sterilized, and then each of them was placed in an external individual paper envelope which surface bears the identical standardized images including the minimal information on the goods (name of the product, date of manufacturing, term of a storage, information 15 on enterprise - manufacturer and so on).

15 Any 30 linings were incorporated in blocks making minimal commodity units, and placed in common packing which surfaces bear a minimal information on the goods, basically repeating the information placed on the products external envelopes.

Each block of products was formed in such a way, that the images on surfaces of internal individual envelopes of products did not repeat.

20 The blocks of products making minimal commodity unit were offered for retail trade.

EXAMPLE 2.

Each of 30 children's diapers was placed in a paper envelope which surface bears various images in the form of color pictures, bright and attractive to a child, 25 and also including not repeating advises on a children care.

This block of products, which makes minimal commodity unit, was placed in a common packing. Surfaces of the packing bear images including the minimal information on the goods. The blocks thus packed were offered for retail trade.

EXAMPLE 3.

Aroma of freshness was given to a set of pampers of one and the same size. Each product was placed in a tight individual envelope which surface bears images in the form of texts of optimistic characters being fragments from literary 5 works and inspiring respect for the proof, courageous and persistent people.

Any 20 products, which envelope surfaces bear non-repeated images, were incorporated in blocks making minimal commodity units, and placed in common packing, which surfaces bear images including the minimal information on the goods. The blocks thus packed were offered for retail trade.

10

Implementation of the present invention should raise competitiveness of the single use hygienic products, which are made according to the invention, thanks to the variety in appearance of products making individual commodity 15 unit, each of which is a source of the accessible, useful, interesting, various and periodically updated information. There will be stimulus for purchase of such products, instead of products without such information.

The images with such information are placed on surfaces of individual envelopes of hygienic products, instead of being placed on the common packing surfaces. It allows to increase essentially the volume of the information, received 20 by a consumer, and also to give to this information essentially new qualities - namely, the variety and non-repeatability.

The known method of placing of the advertising information on packing or elements of packing surfaces solves a task of attraction of consumer's attention to the goods and services which have been not connected directly to the products - 25 carriers of advertising information. It is hardly capable to interest the consumer and to induce him (her) to buy these goods only because they are the carriers of extraneous advertising.

Among other things, the different character of the images placed on the carriers surfaces in the known and in the proposed methods, not only has the

different aims, but determines also different ways of achievement of these aims: the images of advertising nature should be regularly repeated, while the images of the proposed nature should be regularly changed.

CLAIMS

1. A single use hygienic product characterized in that
 - it has an individual envelope which surface bears images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer.
2. The product according to claim 1, wherein the individual envelope, which surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, is the sole envelope of the product.
3. The product according to claim 1, wherein the individual envelope, which surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, is the internal envelope, and the product is additionally covered with an external individual envelope, which surface bears images with the minimally necessary standardized information about the given products.
4. The product according to claims 1, 2 or 3, wherein the individual envelope with the images of educational, entertaining, instructive, or other nature, attractive to a consumer, covers the product from all sides.
5. The product according to claim 4, wherein the individual envelope covers the product from all sides in such a manner that a closed tight space is created inside the individual envelope.
6. The product according to claim 5, wherein the product covered with an individual envelope, is sterile.

7. The product according to claims 5 or 6, wherein the product covered with the individual envelope, is aromatized.

8. A method of single use hygienic products packing characterized in that

5 - any said product is covered with an individual envelope which surface bears images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer,

 - some number of said products, which are covered with individual envelopes, are placed in common packing making a minimal commodity unit,

10 10 surface of said common packing bears images with the minimally necessary standardized information about the products, and

 - the images on surfaces of the individual envelopes of products making minimal commodity unit, are not identical.

15 9. The method of packing according to claim 8, wherein any product is covered with a sole individual envelope which surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer.

20 10. The method of packing according to claim 8, wherein any product is covered with the individual envelope, which surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, said individual envelope is internal one, and any product is additionally covered with an external individual envelope which surface bears

25 25 images with the minimally necessary standardized information about the products.

11. The method of packing according to claims 8, 9 or 10, wherein, at least, one image of educational, entertaining, instructive, or other nature,

attractive to a consumer, which is placed on surfaces of individual envelopes of products making minimal commodity unit, does not repeat.

12. The method of packing according to claims 8, 9 or 10, wherein any 5 image of educational, entertaining, instructive, or other nature, attractive to a consumer, which is placed on surfaces of individual envelopes of the products making minimal commodity unit, does not repeat.

13. The method of packing according to claims 8, 9, 10, 11 or 12, wherein 10 the individual envelopes, which surfaces bear the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, covering products making minimal commodity unit, are periodically substituted by envelopes which surfaces bear other images of the same nature, thus allowing to minimize probability of repeated purchase by one 15 consumer of products with the known images on surfaces of the individual envelopes.

14. The method of packing according to claims 8, 9, 10, 11, 12 or 13, wherein any product is covered from all sides by the individual envelope, which 20 surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer.

15. The method of packing according to claim 14, wherein the product is covered with the individual envelope from all sides in such a way, that a closed 25 tight space is created inside the individual envelope.

16. The method of packing according to claim 15, wherein the product covered with the individual envelope, is subjected by sterilization.

17. The method of packing according to claim 14, wherein the product is aromatized before it is covered with the individual envelope.

18. The method of packing according to claims 8, 9, 10, 11, 12, 13, 14, 15,
5 16 or 17, wherein the products individual envelopes, which surface bear the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, have various color and/or texture.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/RU 99/00322

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61F13/15 B65075/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61F B65D G09F B44C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 79 23 932 U (UNILEVER) 26 March 1981 (1981-03-26) page 3, line 30-35; claim 1; figure 4	1,2,4,5
A	---	9,14,15, 18
X	US 2 750 033 A (JOSEPH PICKENS) 12 June 1956 (1956-06-12) column 1, line 1-3 column 2, line 27-31; figures 1,6,7	1,2,4,5
A	---	9,14,15, 18
X	EP 0 798 229 A (4P FOLIE FORCHHEIM) 1 October 1997 (1997-10-01) abstract; figure 1	1,2,4,5
A	---	9,14,15, 18
	-/-	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

31 January 2000

08/02/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5018 Patentstaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3015

Authorized officer

Seabra, L

INTERNATIONAL SEARCH REPORT

International Application No
PCT/RU 99/00322

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 640 332 A (JOHNSON & JOHNSON MEDICAL INC.) 1 March 1995 (1995-03-01) abstract column 3, line 34-40; figure 3	1,2,4-6
A	WO 97 45089 A (PROCTER & GAMBLE COMPANY) 4 December 1997 (1997-12-04) page 5, line 24-26 page 5, line 34 -page 6, line 1	9,14-16
A	GB 2 277 016 A (NICHOLAS J. MILLS) 19 October 1994 (1994-10-19) abstract; figures 3A,3B	3,10
		8,11-13, 18

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.
PCT/RU 99/00322

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
DE 7923932	U		NONE		
US 2750033	A	12-06-1956	NONE		
EP 0798229	A	01-10-1997	DE 19611665 C		23-10-1997
EP 0640332	A	01-03-1995	GB 2281274 A AT 172095 T AU 681168 B AU 7150494 A CA 2131051 A DE 69413913 D DE 69413913 T ES 2123718 T JP 2960311 B JP 7148198 A US 5749842 A ZA 9406625 A		01-03-1995 15-10-1998 21-08-1997 16-03-1995 01-03-1995 19-11-1998 08-04-1999 16-01-1999 06-10-1999 13-06-1995 12-05-1998 28-02-1996
WO 9745089	A	04-12-1997	AU 3150297 A AU 3150397 A BR 9709610 A BR 9709628 A CA 2256472 A CN 1225572 A CZ 9803928 A EP 0901361 A JP 11513916 T NO 985591 A WO 9745088 A US 5947302 A US 5865322 A US 5839585 A		05-01-1998 05-01-1998 10-08-1999 10-08-1999 04-12-1997 11-08-1999 14-04-1999 17-03-1999 30-11-1999 01-02-1999 04-12-1997 07-09-1999 02-02-1999 24-11-1998
GB 2277016	A	19-10-1994	AU 6507494 A WO 9423677 A		08-11-1994 27-10-1994